

## ABSTRACT OF THE DISCLOSURE

A multi-layer circuit board includes first, second, third, fourth, fifth, sixth and seventh insulating substrates disposed sequentially one above the other; first, second, third and fourth signal wiring layers; first, second and third ground wiring layers; and a power wiring layer. Each of the first and seventh insulating substrates has a thickness ranging from 2.5 to 7.5 mil. Each of the second and sixth insulating substrates has a thickness ranging from 3 to 13 mil. Each of the third and fifth insulating substrates has a thickness ranging from 3 to 15 mil. The fourth insulating substrate has a thickness ranging from 2 to 6 mil. The first signal wiring layer has a first resistance with respect to the first ground wiring layer. The second signal wiring layer has a second resistance with respect to the first and second ground wiring layers. The third signal wiring layer has a third resistance with respect to the third ground wiring layer and the power wiring layer. The fourth signal wiring layer has a fourth resistance with respect to the third ground wiring layer. The first, second, third and fourth resistances are within the range of 49.5 to 60.5 ohms.

25

"Express Mail" mailing label number EL674894280115  
Date of Deposit 16 March 81  
I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231.

Bruce Mahaney  
(printed name)

B. Mahaney  
(signature)